

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
West Central Regional Office
STATEMENT OF LEGAL AND FACTUAL BASIS

Bassett Furniture Industries, Inc., Bassett Fiberboard
53 Trenthill Drive - Bassett, Virginia
Permit No. WCRO-30286

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Bassett Furniture Industries, Inc., Bassett Fiberboard has applied for a Title V Operating Permit renewal for its Bassett Fiberboard facility. The Department reviewed the application for renewal and prepared a draft/proposed Title V Operating Permit. The public notice and EPA review periods expired with no comments received.

The original Title V Operating permit expires September 1, 2006 therefore this first renewal permit is dated **September 1, 2006**. This permit will expire on **August 31, 2011**.

Engineer/Permit Contact: _____ Date: _____

Air Permit Manager: _____ Date: _____

Regional Director _____ Date: _____

FACILITY INFORMATION

Permittee

Bassett Furniture Industries, Inc.
P.O. Box 626
Bassett VA 24055

Facility

Bassett Fiberboard
53 Trenthill Drive
Bassett VA 24055

County-Plant Identification Number: 51-089-0065

SOURCE DESCRIPTION

NAICS 321219 (Formerly SIC 2493) - This facility utilizes kiln-dried hardwood chips, flakes and dust generated by furniture manufacturing processes to produce a fiberboard product.

The facility has one state minor NSR permit issued on May 2, 1977 and amended October 8, 1999 for a Roemac wood burner and associated Keeler boiler (BL2). The Keeler boiler is subject to the applicable requirements of the Industrial Boiler MACT (Subpart DDDDD). The second boiler on site, a 25 MMBtu/hr Cleaver Brooks (BL1) is *not* subject to the boiler MACT since it is an existing fire-tube boiler.

Fiberboard manufacturing operations at this facility are subject to applicable requirements of the Plywood and Composite Wood Products MACT (Subpart DDDD).

The original Title V Operating Permit was issued to this facility on September 1, 2001. This is the first Title V renewal. There have been no changes to the facility requiring a permit action during this time. An exemption was issued on February 3, 2006 for the addition of an eleventh fabric filter baghouse.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time. The facility was last inspected on January 5 and January 26, 2006 and was found to be in compliance.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Emission Unit Description	Capacity/Size	Pollution Control Device (PCD)	Pollutant	Applicable Permit
Fuel Burning Subject to 9 VAC 5 Chapter 40 (Existing)					
BL-1	nat'l gas/#2 f.o. boiler (standby) Cleaver Brooks; 1969	25.1 MMBtu/hr	none	--	N/A
Fuel Burning Subject to 9 VAC 5 Chapter 80 (New) and Boiler MACT					
BL-2	Roemac wood burner/ Keeler boiler 1977	35 MMBtu/hr	cyclone collector and venturi scrubber	PM/PM ₁₀	5/2/1977 amd. 10/08/1999
Miscellaneous Woodworking Subject to 9 VAC 5 Chapter 40 (Existing)					
WW1-11	miscellaneous woodworking	54,750 tons/yr	(11) fabric filters MikroPul or Carter Day	PM/PM ₁₀	N/A
Fiberboard Manufacturing Subject to 9 VAC 5 Chapter 40 (Existing) and Plywood MACT					
DR1	wood fiber dryer; 1969	7 tons fiber/hr	¹ Rennenberg high efficiency collector; ² Ducon multicyclone; ³ wet scrubber	PM/PM ₁₀	N/A
PL1	fiberboard press line Simple Kamp German Press - 1970	7 tons/hr	(3) dynamic separators Aerodyne	PM/PM ₁₀	

EMISSIONS INVENTORY

Emissions as provided in the annual emission inventory update for calendar year 2005 are summarized as follows:

2004 Pollutant Emissions in Tons per Year								
	CO	VOC	SO ₂	PM ₁₀	PM	NOx	Methanol	Formaldehyde
TOTAL	41.42	19.22	1.74	13.08	13.13	34.08	3.39	10.18

A copy of the 2005 Pollutant Emissions Report is included in the file.

EMISSION UNIT APPLICABLE REQUIREMENTS

Limitations - Cleaver Brooks boiler (BL1)

- approved fuels are natural gas and distillate oil. (Distillate oil meets the ASTM D396 specification for numbers 1 or 2 fuel oil.)
(9 VAC 5-80-110)
- emissions limits:

PM/PM ₁₀	0.39 lbs/hr
Sulfur Dioxide	66.3 lbs/hr

(9 VAC 5-80-110, 9 VAC 5-40-900A.1 and 9 VAC 5-40-930A.1)
- visible emissions not to exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity
(9 VAC 5-40-80, 9 VAC 5-80-110 and 9 VAC 5-40-940)

Limitations - Roemac Burner/Keeler Boiler (BL2)

Subject to Industrial Boiler MACT (Subpart DDDDD)

- emissions limits:

PM/PM ₁₀	23.84 lbs/hr
Sulfur Dioxide	92.4 lbs/hr

(9 VAC 5-80-110, 9 VAC 5-40-900A.1 and 9 VAC 5-40-930A.1)
- particulate emissions controlled by a cyclone collector and venturi scrubber.
(9 VAC 5-40-20.E)
- approved fuel is wood.
(9 VAC 5-80-110 and permit dated May 2, 1977 amended October 8, 1999)
- visible emissions not to exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity
(9 VAC 5-40-80, 9 VAC 5-80-110 and 9 VAC 5-40-940)

Limitations - Wood Fiber Dryer (DR1)

Subject to Plywood and Composite Wood Products MACT (Subpart DDDD)

- particulate emissions controlled by the following collectors in series:
 - one high efficiency collector

- one Ducon multiclone
- one wet scrubber
(9 VAC 5-40-20.E and 9 VAC 5-80-110)
- visible emissions not to exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity
(9 VAC 5-40-80 and 9 VAC 5-80-110)
- emissions limits:
PM/PM₁₀ 15.1 lbs/hr
(9 VAC 5-80-110)

Limitations - Fiberboard Press Line (PL1)

Subject to the requirements for Plywood and Composite Wood Products MACT (Subpart DDDD)

- particulate emissions controlled by three Aerodyne dynamic separators
(9 VAC 5-40-20.E and 9 VAC 5-80-110)
- visible emissions not to exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity
(9 VAC 5-40-80 and 9 VAC 5-80-110)
- emissions limits:
PM/PM₁₀ 15.1 lbs/hr
(9 VAC 5-80-110)

Limitations - Woodworking Fabric Filters (WW 1-11)

- particulate emissions from woodworking equipment controlled by eleven separate fabric filters
(9 VAC 5-50-260 and 9 VAC 5-80-110)
- visible emissions from the fabric filters not to exceed 5% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity
(9 VAC 5-40-80 and 9 VAC 5-80-110 and 9 VAC 5-50-260)
- emissions limits:
PM/PM₁₀ 0.01 gr/dscf (each)
(9 VAC 5-80-110 and 9 VAC 5-50-260)

Maintenance/Operating Procedures - Facility Wide

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, from equipment covered in the Title V permit through implementation of an operations and maintenance schedule as follows:

- Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for manufacturing equipment and air pollution control equipment
- Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the manufacturing equipment and air pollution control equipment and maintain records of inspection results.
- Have available written operating procedures for the manufacturing equipment and air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at minimum, if such recommendations exist.
- Train operators in the proper operation of the manufacturing equipment and air pollution control equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

(9 VAC 5-80-110 K, 9 VAC 5-80-110 F; 9 VAC 5-170-160)

Monitoring - Facility Wide

Compliance Assurance Monitoring (CAM) is not required at this facility for the following reasons:

- fiberboard manufacturing operations are covered under the Plywood and Composite Wood Products MACT (DDDD) - CAM is not required for processes already covered by a MACT;
- the Roemac wood burner/Keeler boiler is covered under the Industrial Boiler MACT (DDDDD) - CAM is not required for processes already covered by a MACT; and
- PM emissions from woodworking equipment to the fabric filters does not exceed 100 tons per year for each system (baghouse), therefore CAM is not required for the fabric filters.

Periodic Monitoring requirements for visual emission observations on the boilers, fabric filters

and other exhausts are being changed from *weekly* to *monthly*. This facility has conducted the required weekly observations for the duration of this first five-year Title 5 permit cycle with no violations. Weekly records have been maintained in proper order. This decision to reduce periodic monitoring requirements is being made with the approval of the regional air compliance staff.

Recordkeeping - Facility Wide

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit

The permittee shall maintain records of all monthly visible observations along with any corrective actions

Reporting - Facility Wide

The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year - this report to include:

- time period included in the report
- deviations from permit requirements - deviations include, but are not limited to:
 - exceedance of emissions limitations or operational restrictions;
 - excursions from control device operating parameter requirements, or,
 - failure to meet monitoring, recordkeeping, or reporting requirements.

(9 VAC 5-80-110 F)

The permittee shall submit an annual compliance certification to EPA and DEQ no later than March 1 to include:

- time period included in the certification
- identification of each term or condition of the permit that is the basis of the certification
- compliance status
- whether compliance was continuous or intermittent
- the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- any other facts as the permit may require to determine the compliance status of the source.

(9 VAC 5-80-110 K.5)

The permittee shall notify the regional office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

In the event that any affected facility or related air pollution control equipment fails or

malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the regional office.
(9 VAC 5-20-180 C)

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 3-2001”.

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

J. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources

9 VAC 5-80-190. Changes to Permits.

9 VAC 5-80-260. Enforcement.

9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources

9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The

reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

STATE ONLY APPLICABLE REQUIREMENTS

This permit contains no State Only Applicable Requirements

FUTURE APPLICABLE REQUIREMENTS

All aspects of this facility are covered by applicable requirements of a MACT (Plywood and Composite Wood Products, Industrial Boiler) that have already been promulgated or are not subject to a MACT (woodworking). This facility should not be covered by any known future applicable requirements.

INAPPLICABLE REQUIREMENTS

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. Opacity exceedances during malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. Opacity exceedances during startup and shut down will be reviewed with enforcement discretion using the requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

COMPLIANCE PLAN

This facility is not subject to a compliance plan.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
BL3 ⁽¹⁾	Rennenberg n.gas-fired dryer	9 VAC 5-80-720.C	NOx	6 MMBtu/hr
ST 1-3	storage tanks	9 VAC 5-80-720.B	VOC	14,000 gal. each
ST 4,5	storage tanks	9 VAC 5-80-720.B	VOC	20,000 gal. each
ST6	resin storage tank	9 VAC 5-80-720.B	VOC	3,600 gal.
ST7	diesel UST	9 VAC 5-80-720.B	VOC	10,000 gal.
ST8	diesel storage tank	9 VAC 5-80-720.B	VOC	10,000 gal.

⁽¹⁾ particulate emissions from BL3 are controlled by the same venturi scrubber that is connected to BL2

All activities listed are insignificant due to emission levels as specified in 9 VAC 5-80-720 B.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The draft/proposed permit was advertised for public notice in "The Martinsville Bulletin" on June 6, 2006. The required 30-day public notice period will closed on July 6, 2006 with no comments received.

This permit was advertised for *concurrent review* with EPA. The 45-day review period expired on July 21, 2006 with no comments received.